IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: **Banerjee et al.**	§	
	§	Group Art Unit: **3714**
Serial No.: **09/941,251**	§	
	§	Examiner: **Duffy, David W.**
Filed: **August 28, 2001**	§	
	§	
For: **Method for Improved Administering of Tests Using Customized User Alerts**	§	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

35525
PATENT TRADEMARK OFFICE
CUSTOMER NUMBER

APPEAL BRIEF (37 C.F.R. 41.37)

This brief is in furtherance of the Notice of Appeal, filed in this case on September 21, 2007.

A fee of $510.00 is required for filing an Appeal Brief. Please charge this fee to IBM Corporation Deposit Account No. 09-0447. No additional fees are believed to be necessary. If, however, any additional fees are required, I authorize the Commissioner to charge these fees which may be required to IBM Corporation Deposit Account No. 09-0447. No extension of time is believed to be necessary. If, however, an extension of time is required, the extension is requested, and I authorize the Commissioner to charge any fees for this extension to IBM Corporation Deposit Account No. 09-0447.

REAL PARTY IN INTEREST

The real party in interest in this appeal is the following party: International Business Machines Corporation of Armonk, New York.

RELATED APPEALS AND INTERFERENCES

With respect to other appeals or interferences that will directly affect, or be directly affected by, or have a bearing on the Board's decision in the pending appeal, there are no such appeals or interferences.

STATUS OF CLAIMS

A. TOTAL NUMBER OF CLAIMS IN APPLICATION

Claims in the application are: 1-51

B. STATUS OF ALL THE CLAIMS IN APPLICATION

1. Claims canceled: 9-11, 19-20, 34, 42-43
2. Claims withdrawn from consideration but not canceled: none
3. Claims pending: 1-8, 12-18, 21-33, 35-41 and 44-51
4. Claims allowed: none
5. Claims rejected: 1-8, 12-18, 21-33, 35-41 and 44-51
6. Claims objected to: none

C. CLAIMS ON APPEAL

The claims on appeal are: 1-8, 12-18, 21-33, 35-41 and 44-51

STATUS OF AMENDMENTS

No amendments were made after the Final Office Action dated August 23, 2007.

SUMMARY OF CLAIMED SUBJECT MATTER

A. CLAIM 1 - INDEPENDENT

The subject matter of claim 1 is directed to a computer-implemented method for monitoring responses to test questions presented in a data processing system (100, 400, 600). (*Specification* on page 4, lines 3-26; and Figures 1, 4, and 6.) A presentation of the test questions is identified on the data processing system. (*Specification* on page 8, lines 9-19; and page 18, lines 16-21.) Responsive to the presentation of the test questions on the data processing system, test question timing data is monitored. (*Specification* on page 18, lines 22-32; page 22, lines 1-21; page 30, lines 8-10 and 16-32; and steps 1014, 1016 in Figure 10.) The test question timing data represents an elapsed time since an answered question from the test questions has been presented. (See *Specification* on page 34, lines 14-16.) The elapsed time is an amount of time in attempting to answer a test question. (*Specification* on page 33, lines 23-25.) An alert is generated after the test question timing data exceeds a threshold while continuing to present the test question for the test taker to answer. (*Specification* on page 23, lines 1-7; page 25, lines 8-14 and 18-27; page 30, line 8, through page 31, line 14; and steps 1016, 1020, 1022, 1026 in Figure 10.) The alert apprises a test taker that the elapsed time is excessive for the test question (*Specification* on page 25, 18-27.) The alert is generated based on an alert schedule for the test question. (*Specification* on page 29, lines 10-14; step 920 in Figure 9; and step 1022 in Figure 10.) The alert schedule is generated for the test taker based on a customized alert profile for the test taker. (*Specification* on page 29, 8-14; and steps 918, 920 in Figure 9.) The customized alert profile includes previous performance information of the test taker, information to associate a level of difficulty of a particular test question with a capability category of the test taker to answer the particular test question, and alert thresholds for the test questions. (*Specification* on page 25, line 15, thorough page 27, line 8; page 28, line 9, through page 29, line14; and Figures 8A and 8B.)

B. CLAIM 6 – INDEPENDENT

The subject matter of claim 6 is directed to a computer-implemented method of monitoring a test question response time. (*Specification* on page 4, lines 3-26; and Figures 1, 4, and 6.) A test is administered to a remotely located user of a client device (108, 111, 114 in

Figure 1 and 608, 612 in Figure 6) receiving test question timing data from the client device. (*Specification* on page 8, lines 9-19; and page 18, lines 16-21.) The test question timing data represents an elapsed time used by the remotely located user in attempting to answer a test question from a plurality of test questions that are to be provided to the client device during administration of the test. (*Specification* on page 25, lines 8-14 and 18-27; page 33, lines 23-25; page 34, lines 14-16.) The test question timing data is output to a proctor device (105-107 in Figure 1 and 604 in Figure 6) such that the proctor device may monitor the elapsed time in attempting to answer the test question for the remotely located user. (*Specification* on page 18, lines 22-32; page 22, lines 1-21; and 530 in Figure 5.) The remotely located user can send an instant message to and receive an instant message from the proctor device and the proctor device can send an instant message to and receive an instant message from a plurality of remotely located users. (*Specification* on page 18, line 32, through page 19, line 9; page 21, lines 23-31; page 22, lines 1-17; and 520 in Figure 5.) Instant messages are used to communicate and clarify test question wording details, test instructions, and the test question timing data during the test. (*Specification* on page 18, line 32, through page 19, line 9; page 21, lines 23-31; page 22, lines 1-17; and 520 in Figure 5.) The remotely located user is alerted when the test question timing data exceeds a predetermined threshold based on an alert schedule for the test question while the remotely located user continues to attempt to answer the test question. (*Specification* on page 23, lines 1-7; page 25, lines 8-14 and 18-27; page 30, lines 29-32; and steps 1016, 1020, 1022, 1026 in Figure 10.) The alert schedule is generated for the remotely located user based on a customized alert profile for the remotely located user. (*Specification* on page 29, 8-14; steps 918, 920 in Figure 9; and step 1022 in Figure 10.) The customized alert profile includes previous performance information of the remotely located user, information to associate a level of difficulty of a particular test question with a capability category of the remotely located user to answer the particular test question, and a plurality of predetermined thresholds for the plurality of test questions. (*Specification* on page 25, line 15, thorough page 27, line 8; page 28, line 9, through page 29, line14; and Figures 8A and 8B.)

C. CLAIM 23 – INDEPENDENT

The subject matter of claim 23 is directed to an apparatus for monitoring responses to test questions presented in a data processing system (100, 400, 600). (*Specification* on page 4, lines 3-26; and Figures 1, 4, and 6.) The apparatus comprises identifying means (450) for identifying presentation of the test questions on the data processing system. (*Specification* on page 8, lines 9-19; and page 18, lines 16-21.) The apparatus comprises monitoring means (430, 500), responsive to the presentation of the test questions on the data processing system, for monitoring test question timing data in which the test question timing data represents an elapsed time since an answered question from the test questions has been presented. (*Specification* on page 18, lines 22-32; page 22, lines 1-21; page 30, lines 8-10 and 16-32; and steps 1014, 1016 in Figure 10.) The elapsed time is an amount of time in attempting to answer a test question. (See *Specification* on page 34, lines 14-16.) The apparatus comprises generating means for generating an alert after the test question timing data exceeds a threshold while continuing to present the test question for the test taker to answer. (*Specification* on page 23, lines 1-7; page 25, lines 8-14 and 18-27; page 30, line 8, through page 31, line 14; and steps 1016, 1020, 1022, 1026 in Figure 10.) The alert apprises a test taker that the elapsed time is excessive for the test question. (*Specification* on page 33, lines 23-25.) The alert is generated based on an alert schedule for the test question. (*Specification* on page 29, lines 10-14; step 920 in Figure 9; and step 1022 in Figure 10.) The alert schedule is generated for the test taker based on a customized alert profile for the test taker. (*Specification* on page 29, 8-14; and steps 918, 920 in Figure 9.) The customized alert profile includes previous performance information of the test taker, information to associate a level of difficulty of a particular test question with a capability category of the test taker to answer the particular test question, and alert thresholds for the test questions. (*Specification* on page 25, line 15, thorough page 27, line 8; page 28, line 9, through page 29, line14; and Figures 8A and 8B.)

D. CLAIM 28 – INDEPENDENT

The subject matter of claim 28 is directed to a data processing system (100, 200, 400, 600) comprising a bus system (206, 212, 480), a communications unit (210) connected to the bus system, a storage device (232, 440, 450, 470, 616, 624) connected to the bus system, and a processing unit (202, 204) connected to the bus system. (*Specification* on page 10, lines 14-26; page 11, lines 10-11; page 14, lines 22-28; page 23, lines 27-31; and Figures 1, 2, 4, and 6.) The

storage device includes a set of instructions and the processing unit executes the set of instructions. (*Specification* on page 14, lines16-28.) The processing unit executes the set of instructions to identify presentation of the test questions on the data processing system. (*Specification* on page 8, lines 9-13; and page 18, lines 16-21.) The processing unit executes the set of instructions to monitor test question timing data in response to the presentation of the test questions on the data processing system in which the test question timing data represents an elapsed time since an answered question from the test questions has been presented. (*Specification* on page 18, lines 22-32; page 22, lines 1-21; page 30, lines 8-10 and 16-32; and steps 1014, 1016 in Figure 10.) The elapsed time is an amount of time in attempting to answer a test question. (*Specification* on page 33, lines 23-25.) The processing unit executes the set of instructions to generate an alert after the test question timing data exceeds a threshold while continuing to present the test question for a test taker to answer. (*Specification* on page 29, lines 10-14; step 920 in Figure 9; and step 1022 in Figure 10.) The alert apprises the test taker that the elapsed time is excessive for the test question. (*Specification* on page 25, 18-27.) The alert is generated based on an alert schedule for the test question. (*Specification* on page 29, 10-14; step 920 in Figure 9; and step 1022 in Figure 10.) The alert schedule is generated for the test taker based on a customized alert profile for the test taker. (*Specification* on page 29, 8-14; and steps 918, 920 in Figure 9.) The customized alert profile includes previous performance information of the test taker, information to associate a level of difficulty of a particular test question with a capability category of the test taker to answer the particular test question, and alert thresholds for the test questions. (*Specification* on page 25, line 15, thorough page 27, line 8; page 28, line 9, through page 29, line14; and Figures 8A and 8B.)

E. CLAIM 29 – INDEPENDENT

The subject matter of claim 29 is directed to an apparatus for monitoring a test question response time. (100, 400, 600). (*Specification* on page 4, lines 3-26; and Figures 1, 4, and 6.) The apparatus comprises a controller (410) and at least one interface (420, 430, 440, 450, 460, 470) coupled to the controller. (*Specification* on page 14, line 22, through page 15, line 5; and Figure 4.) The controller administers a test to a remotely located user of a client device (108, 111, 114 in Figure 1 and 608, 612 in Figure 6) via the at least one interface (420, 450). (*Specification* on page 8, lines 9-19; and page 18, lines 16-21.) The controller receives test

question timing data from the client device via the at least one interface (420, 610, 614). (*Specification* on page 18, lines 22-24; and page 23, lines 8-13.) The test question timing data represents an elapsed time used by the remotely located user in attempting to answer a test question from a plurality of test questions that are to be provided to the client device during administration of the test. (*Specification* on page 18, lines 22-32; page 22, lines 1-21; page 30, lines 8-10 and 16-32; and steps 1014, 1016 in Figure 10.) The controller outputs the test question timing data to a proctor device (105-107 in Figure 1 and 604 in Figure 6) via the at least one interface (430, 500) such that the proctor device may monitor the elapsed time in attempting to answer the test question for the remotely located user (608, 612). (*Specification* on page 18, lines 22-32; page 22, lines 1-21; and 530 in Figure 5.) The processing unit provides instant messaging between the remotely located user and a proctor. (*Specification* on page 18, line 32, through page 19, line 9; page 21, lines 23-31; page 22, lines 1-17; and 520 in Figure 5.) The remotely located user can send an instant message to and receive an instant message from the proctor and the proctor can send an instant message to and receive an instant message from a plurality of remotely located users. (*Specification* on page 18, line 32, through page 19, line 9; page 21, lines 23-31; page 22, lines 1-17; and 520 in Figure 5.) Instant messages (520) are used to communicate and clarify test question wording details, test instructions, and the test question timing data during the test. (*Specification* on page 18, line 32, through page 19, line 9; page 21, lines 23-31; page 22, lines 1-17; and 520 in Figure 5.) The controller alerts the remotely located user when the test question timing data exceeds a predetermined threshold based on an alert schedule for the test question. (*Specification* on page 23, lines 1-7; page 25, lines 8-14 and 18-27; page 30, lines 29-32; and steps 1016, 1020, 1022, 1026 in Figure 10.) The alert schedule is generated for the remotely located user based on a customized alert profile for the remotely located user. (*Specification* on page 29, 8-14; steps 918, 920 in Figure 9; and step 1022 in Figure 10.) The customized alert profile includes previous performance information of the remotely located user, information to associate a level of difficulty of a particular test question with a capability category of the remotely located user to answer the particular test question, and a plurality of predetermined thresholds for the plurality of test questions. (*Specification* on page 25, line 15, thorough page 27, line 8; page 28, line 9, through page 29, line14; and Figures 8A and 8B.)

F. CLAIM 46 – INDEPENDENT

The subject matter of claim 46 is directed to a computer program product in a computer readable medium for monitoring a test question response time. (*Specification* on page 4, lines 3-26; and Figures 1, 4, and 6.) The computer program product provides first instructions for administering a test to a remotely located user of a client device (108, 111, 114 in Figure 1 and 608, 612 in Figure 6). (*Specification* on page 8, lines 9-19; and page 18, lines 16-21.) The computer program product provides second instructions for receiving test question timing data from the client device. (*Specification* on page 18, lines 22-24; and page 23, lines 8-13.) The test question timing data represents an elapsed time used by the remotely located user in attempting to answer a test question from a plurality of test questions that are to be provided to the client device during administration of the test. (*Specification* on page 25, lines 8-14 and 18-27; page 33, lines 23-25; page 34, lines 14-16.) The computer program product provides third instructions for outputting the test question timing data to a proctor device such that the proctor device may monitor the elapsed time in attempting to answer the test question for the remotely located user. (*Specification* on page 18, lines 22-32; page 22, lines 1-21; and 530 in Figure 5.) The computer program product provides fourth instructions for providing instant messaging between the remotely located user and a proctor. (*Specification* on page 18, line 32, through page 19, line 9; page 21, lines 23-31; page 22, lines 1-17; and 520 in Figure 5.) The remotely located user can send an instant message to and receive an instant message from the proctor and the proctor can send an instant message to and receive an instant message from a plurality of remotely located users. (*Specification* on page 18, line 32, through page 19, line 9; page 21, lines 23-31; page 22, lines 1-17; and 520 in Figure 5.) Instant messages (520) are used to communicate and clarify test question wording details, test instructions, and the test question timing data during the test. (*Specification* on page 18, line 32, through page 19, line 9; page 21, lines 23-31; page 22, lines 1-17; and 520 in Figure 5.) The computer program product provides fifth instructions for alerting the remotely located user when the test question timing data exceeds a predetermined threshold based on an alert schedule for the test question while the remotely located user continues to attempt to answer the test question. (*Specification* on page 23, lines 1-7; page 25, lines 8-14 and 18-27; page 30, lines 29-32; and steps 1016, 1020, 1022, 1026 in Figure 10.) The alert schedule is generated for the remotely located user based on a customized alert profile for the remotely located user. (*Specification* on page 29, 8-14; steps 918, 920 in Figure 9; and step 1022 in Figure

10.) The customized alert profile includes previous performance information of the remotely located user, information to associate a level of difficulty of a particular test question with a capability category of the remotely located user to answer the particular test question, and a plurality of predetermined thresholds for the plurality of test questions. (*Specification* on page 25, line 15, thorough page 27, line 8; page 28, line 9, through page 29, line14; and Figures 8A and 8B.)

G. CLAIM 47 – INDEPENDENT

The subject matter of claim 47 is directed to a computer program product in a computer readable medium for use in monitoring responses to test questions presented in a data processing system (100, 400, 600). (*Specification* on page 4, lines 3-26; and Figures 1, 4, and 6.) The computer program product provides first instructions for identifying presentation of the test questions on the data processing system. (*Specification* on page 8, lines 9-19; and page 18, lines 16-21.) The computer program product provides second instructions, responsive to the presentation of the test questions on the data processing system, for monitoring test question timing data in which the test question timing data represents an elapsed time since an answered question from the test questions has been presented. (*Specification* on page 18, lines 22-32; page 22, lines 1-21; page 30, lines 8-10 and 16-32; and steps 1014, 1016 in Figure 10.) The elapsed time is an amount of time in attempting to answer a test question. (See *Specification* on page 34, lines 14-16.) The computer program product provides third instructions for generating an alert after the test question timing data exceeds a threshold while continuing to present the test question for the test taker to answer. (*Specification* on page 23, lines 1-7; page 25, lines 8-14 and 18-27; page 30, line 8, through page 31, line 14; and steps 1016, 1020, 1022, 1026 in Figure 10.) The alert apprises a test taker that the elapsed time is excessive for the test question. (*Specification* on page 25, 18-27.) The alert is generated based on an alert schedule for the test question. (*Specification* on page 29, lines 10-14; step 920 in Figure 9; and step 1022 in Figure 10.) The alert schedule is generated for the test taker based on a customized alert profile for the test taker. (*Specification* on page 29, 8-14; and steps 918, 920 in Figure 9.) The customized alert profile includes previous performance information of the test taker, information to associate a level of difficulty of a particular test question with a capability category of the test taker to answer the particular test question, and alert thresholds for the test questions. (*Specification* on

page 25, line 15, thorough page 27, line 8; page 28, line 9, through page 29, line14; and Figures 8A and 8B.)

H. CLAIM 51 – INDEPENDENT

The subject matter of claim 51 is directed to a computer-implemented method for monitoring responses to test questions presented in a data processing system. (100, 400, 600). (*Specification* on page 4, lines 3-26; and Figures 1, 4, and 6.) The method comprises administering a plurality of tests from an examination server to a plurality of remotely located users on a plurality of user devices. (*Specification* on page 7, lines 5-16; page 8, lines 9-19; page 20, lines 16-28; and 510 in Figure 5.) For each test of the plurality of tests that is administered, a session identification is established for the administration of the test to the remotely located user. (*Specification* on page 15, lines 23-31; and page 20, lines 16-28.) The session identification includes a user identification, a test identifier, and a proctor device identifier. (*Specification* on page 16, lines 2-14) For each test of the plurality of tests that is administered, presentation of the test questions is identified on a user device of the user devices. (*Specification* on page 8, lines 9-19; and page 18, lines 16-21.) Responsive to the presentation of the test questions on the user device, test question timing data is monitored. (*Specification* on page 18, lines 22-32; page 22, lines 1-21; page 30, lines 8-10 and 16-32; and steps 1014, 1016 in Figure 10.) The test question timing data represents an elapsed time since an answered question from the test questions has been presented. (See *Specification* on page 34, lines 14-16.) The elapsed time is an amount of time in attempting to answer a test question. (*Specification* on page 33, lines 23-25.) For each test of the plurality of tests that is administered, the test question timing data is correlated to the administration of the test to the remotely located user based on the session identification. (*Specification* on page 16, lines 15-24.) For each test of the plurality of tests that is administered, the test question timing data is output to the proctor device, based on the proctor device identifier, in response to determining that evidence of greater than expected response time to the test question is present. (*Specification* on page 16, lines 5-9; page 18, lines 12-27; and page 34, lines 1-7.) For each test of the plurality of tests that is administered, generating an alert message after the test question timing data exceeds a threshold while continuing to present the test question for the remotely located user to answer. (*Specification* on page 23, lines 1-7; page 25, lines 8-14 and 18-27; page 30, line 8, through page 31, line 14; and steps 1016, 1020, 1022,

1026 in Figure 10.) The alert message apprises the remotely located user that the elapsed time is excessive for the test question. (*Specification* on page 25, 18-27.) The alert message is generated based on an alert schedule for the test question. (*Specification* on page 29, lines 10-14; step 920 in Figure 9; and step 1022 in Figure 10.) The alert schedule is generated for the remotely located user based on a customized alert profile for the remotely located user. (*Specification* on page 29, 8-14; and steps 918, 920 in Figure 9.) The customized alert profile includes previous performance information of the remotely located user, information to associate a level of difficulty of a particular test question with a capability category of the remotely located user to answer the particular test question, and a plurality of alert thresholds for the test questions. (*Specification* on page 25, line 15, thorough page 27, line 8; page 28, line 9, through page 29, line14; and Figures 8A and 8B.) For each test of the plurality of tests that is administered, the remotely located user can send instant messages to and receive instant messages from a proctor device associated with the examination server and the proctor device can send instant messages to and receive instant messages from the plurality of remotely located users. (*Specification* on page 18, line 32, through page 19, line 9; page 21, lines 23-31; page 22, lines 1-17; and 520 in Figure 5.) Instant messages (520) are used to communicate and clarify test question wording details, test instructions, and the test question timing data for the remotely located user during the test. (*Specification* on page 18, line 32, through page 19, line 9; page 21, lines 23-31; page 22, lines 1-17; and 520 in Figure 5.)

I. CLAIM 17 – DEPENDENT

The subject matter of claim 17, which depends from independent claim 6, is directed to a computer-implemented method further comprising monitoring the test question timing data for evidence of greater than expected response time to the test question, wherein outputting the test question timing data to a proctor device is performed by a test administration system in response to determining that evidence of greater than expected response time to the test question is present. (*Specification* on page 16, lines 5-9; page 18, lines 12-27; and page 34, lines 1-7.)

J. CLAIM 21 – DEPENDENT

The subject matter of claim 21, which depends from independent claim 6, is directed to a computer-implemented method further comprising storing a response to the test question from .

the remotely located user to update the customized alert profile for use in future tests. (*Specification* on page 24, lines 1-26.)

K. CLAIM 22 – DEPENDENT

The subject matter of claim 22, which depends from independent claim 6, is directed to a computer-implemented method further comprising storing of the timing data for the test question to update timing data for the remotely located user in the customized alert profile for use in future tests. (*Specification* on page 24, lines 1-26; and page 32, lines 21-22.)

L. CLAIM 40 - DEPENDENT

The subject matter of claim 40, which depends from independent claim 29, is directed to an apparatus further comprising a controller that monitors the test question timing data for evidence of greater than expected response time to the test question, wherein the controller outputs the test question timing data to a proctor device is performed by a test administration system in response to determining that evidence of greater than expected response time to the test question is present. (*Specification* on page 16, lines 5-9; page 18, lines 12-27; and page 34, lines 1-7.)

M. CLAIM 44 – DEPENDENT

The subject matter of claim 44, which depends from independent claim 29, is directed to an apparatus further comprising storing a response to the test question from the remotely located user to update the customized alert profile for use in future tests. (*Specification* on page 24, lines 1-26.)

N. CLAIM 45 – DEPENDENT

The subject matter of claim 45, which depends from independent claim 29, is directed to an apparatus further comprising storing of the timing data for the test question to update timing data for the remotely located user in the customized alert profile for use in future tests. (*Specification* on page 24, lines 1-26; and page 32, lines 21-22.)

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The grounds of rejection to review on appeal are as follows:

A. GROUND OF REJECTION 1 (Claims 1-3, 23-25, 28, and 47-48)

The Final Office Action rejects claims 1-3, 23-25, and 47-48 under 35 U.S.C. § 103(a) as being unpatentable over *Thomas*, Method and Apparatus for Improving Performance on Multiple-Choice Exams, U.S. Patent No. 5,885,087 (March 23, 1999), hereinafter referred to as *Thomas*, in view of *Sugimoto*, Method and System for Performing Adaptive Test, U.S. Patent No. 6,755,661 (June 29, 2004), herein after referred to as *Sugimoto*.

B. GROUND OF REJECTION 2 (Claims 4-5, 26-27, 49, and 50)

The Final Office Action rejects claims 4-5, 26-27, 49, and 50 under 35 U.S.C. § 103(a) as being unpatentable over *Thomas* in view of *Sugimoto* as applied to the claims above and further in view of admitted prior art, hereinafter referred to as *APA*.

C. GROUND OF REJECTION 3 (Claims 6, 12, 17-18, 29, 32-33, 35, 40-41, and 46)

The Final Office Action rejects claims 6, 12, 17-18, 29, 32-33, 35, 40-41, and 46 under 35 U.S.C. § 103(a) as being unpatentable over *Thomas* in view of *Sugimoto* and further in view of *Hoehn-Saric et al.*, System and Administration of Remotely-Proctored, Secure Examinations and Methods Therefor, U.S. Patent No 5915973 (June 29, 1999), hereinafter referred to as *Hoehn-Saric*.

D. GROUND OF REJECTION 4 (Claims 7-8, 13, 16, 30-31, 36, and 39)

The Final Office Action rejects claims 7-8, 13, 16, 30-31, 36, and 39 under 35 U.S.C. § 103(a) as being unpatentable over *Thomas* in view of *Sugimoto* and *Hoehn-Saric* as applied to the claims above and further in view of *APA*.

E. GROUND OF REJECTION 5 (Claims 14-15, 21-22, 37-38, and 44-45)

The Final Office Action rejects claims 14-15, 21-22, 37-38, and 44-45 under 35 U.S.C. § 103(a) as being unpatentable by *Thomas* in view of *Sugimoto* and *Hoehn-Saric* as applied to claim 6 above, and further in view of *Kershaw et al.*, System and Methods for Computer Based Testing, U.S. Patent No. 5,827,070 (October 27, 1998), hereinafter referred to as *Kershaw*.

F. GROUND OF REJECTION 6 (Claim 51)

The Final Office Action rejects claim 51 under 35 U.S.C. § 103(a) as being unpatentable by *Kershaw* in view of *Thomas*, *Hoehn-Saric*, and *Sugimoto*.

ARGUMENT

A. GROUND OF REJECTION 1 (Claims 1-3, 23-25, 28, and 47-48)

The Examiner has rejected claims 1-3, 23-25, 28, and 47-48 under 35 U.S.C. § 103(a) as being anticipated by *Thomas*, Method and Apparatus for Improving Performance on Multiple-Choice Exams, U.S. Patent No. 5,885,087 (March 23, 1999) in view of *Sugimoto*, Method and System for Performing Adaptive Test, U.S. Patent No. 6,755,661 (June 29, 2004). This rejection is respectfully traversed.

With respect to independent claims 1, 23, 28, and 47, the Examiner states:

> 4. In regards to claims 1, 3, 23, 25, 28 and 47, Thomas discloses a test timing system that discloses a computerized testing device that conducts testing for a user whereby a question is presented to the user and the time taken by the user to answer the question is tracked and displayed and may be compared to a predetermined time (25-20 and 4:45-65). Examiner contends that the constant display of the elapsed time constitutes an alert and that the predetermined time for a question used to compare to the elapsed time disclosed in the reference would constitute an alert threshold. Thomas further discloses that the system may be used to practice examination skills and improve their test taking skills (3:4-14) and that the system maintains player profiles in order to provide a history of the user's progress including performance by subject or topic (7:43-58). Thomas lacks explicitly disclosing that the alert schedule is based on the profile of the user's previous performance, the relative question difficulty, and alert thresholds and that presentation of test questions are based on levels of difficulty of the test questions and the ability of the test taker.
> 5. In related prior art, Sugimoto discloses a testing system that adapts the timing of a test question when a user takes less than an allotted time on a question and provides the extra time on a later question for the user (abstract and 18:48-54). Sugimoto further discloses that profiles of the test taker are maintained, including skill level of the user (95-7 and fig 9, user ID and skill code), and the profile is used to determine questions presented to the test taker (917-20), a question database that includes information on the question difficulty to be related to the user's skill setting (6:5-7) and a preset time limit for each question (6:63-40), which examiner contends is analogous to an alert threshold, that is changed by the system as the user's skill is determined. One skilled in the art would recognize the advantages of providing more time on questions a user has trouble with and less time on questions the user finds easy in order to complete an exam in the allotted time with the most correct answers possible thus improving the test taker's performance and tailoring a test to a user's ability in order to help them improve incrementally.
> 6. Therefore it would have been obvious to one skilled in the art at the time to have modified Thomas in view of Sugimoto to include the adaptive timing

system in order to further aid the test taker in completing the test in the allotted time while giving as much time as necessary to correctly answer questions and customize the tests presented to the user's ability.

Final Office Action dated August 23, 2007, pages 2-3.

Claim 1, which is representative of the other rejected independent claims 23, 28, and 47 with regard to similarly recited subject matter, reads as follows:

> 1. A computer-implemented method for monitoring responses to test questions presented in a data processing system, the method comprising the computer implemented steps of:
>
> identifying presentation of the test questions on the data processing system;
>
> responsive to the presentation of the test questions on the data processing system, monitoring test question timing data in which the test question timing data represents an elapsed time since an answered question from the test questions has been presented, wherein the elapsed time is an amount of time in attempting to answer a test question; and
>
> generating an alert after the test question timing data exceeds a threshold while continuing to present the test question for the test taker to answer, wherein the alert apprises a test taker that the elapsed time is excessive for the test question, wherein the alert is generated based on an alert schedule for the test question, wherein the alert schedule is generated for the test taker based on a customized alert profile for the test taker, and wherein the customized alert profile includes previous performance information of the test taker, information to associate a level of difficulty of a particular test question with a capability category of the test taker to answer the particular test question, and alert thresholds for the test questions. (emphasis added)

The Examiner bears the burden of establishing a *prima facie* case of obviousness based on the prior art when rejecting claims under 35 U.S.C. § 103. *In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992). *Thomas* and *Sugimoto*, taken alone or in combination, do not teach or suggest "generating an alert after the test question timing data exceeds a threshold while continuing to present the test question for the test taker to answer, wherein the alert apprises a test taker that the elapsed time is excessive for the test question, wherein the alert is generated based on an alert schedule for the test question, wherein the alert schedule is generated for the test taker based on a customized alert profile for the test taker, and wherein the customized alert profile includes previous performance information of the test taker, information to associate a level of difficulty of a particular test question with a capability category of the test taker to answer the particular test question, and alert thresholds for the test questions," as recited in

claims 1, 23, 28, and 47.

Thomas is directed to a computerized learning approach that enables a user to improve their performance on multiple-choice exams. In general, the invention forces test-takers to practice their examination skills and subject matter knowledge in a systematic way. The systematic way forces the users to follow a proven problem-solving approach designed to improve their performance. *Thomas'* invention provides performance feedback to users, for example, elapsed time per question and percentage of correctly answered questions. Figure 1 shows user's performance information 18 in memory 10. *Thomas'* invention can also pinpoint for the user the substantive areas of the exam, which the user is either weak or strong. Further, *Thomas'* invention is able to assist the user in predicting his/her eventual score. *Thomas* discloses a constant display of an elapsed time. The Examiner contends that the constant display of the elapsed time constitutes an alert and that the predetermined time for a question used to compare to the elapsed time disclosed in the reference would constitute an alert threshold. *Thomas* does not mention alert schedules or alert profiles. An alert schedule indicates when alerts will be sent to the examinee. A constant display teaches away from this. *Thomas* does not teach or suggest "generating an alert after the test question timing data exceeds a threshold while continuing to present the test question for the test taker to answer, wherein the alert apprises a test taker that the elapsed time is excessive for the test question, wherein the alert is generated based on an alert schedule for the test question, wherein the alert schedule is generated for the test taker based on a customized alert profile for the test taker, and wherein the customized alert profile includes previous performance information of the test taker, information to associate a level of difficulty of a particular test question with a capability category of the test taker to answer the particular test question, and alert thresholds for the test questions," as recited in claims 1, 23, 28, and 47.

Sugimoto is directed to a method and system for performing adaptive test. A pressure sensitivity test is performed to examine a pressure sensitivity of a solver to time. The method judges, based on a result of the pressure sensitivity test, whether or not the pressure sensitivity of the solver is equal to or higher than a predetermined threshold. If the pressure sensitivity is equal to or higher than the predetermined threshold, the solver is prompted to answer a pending question, acquires an input of the answer, and determines if a time period consumed by the solver in answering the pending question is shorter than a time limit set for answering the pending

question and, if shorter, gives the solver an increased time limit for answering a next question. *Sugimoto* discloses a skill-selecting program that may prompt a user for a skill field (category) and skill level (difficulty). *Sugimoto* discloses displaying a time period from the display of the test question, and displaying the time limit itself. A rest time period, which is calculated by subtracting the time elapsed from the display of the test question from the time limit for that test question, may also be displayed. The Examiner contends that a preset time limit for each question is analogous to an alert threshold, that is changed by the system as the user's skill is determined. *Sugimoto* does not mention alert schedules or alert profiles. *Sugimoto* does not teach or suggest "generating an alert after the test question timing data exceeds a threshold while continuing to present the test question for the test taker to answer, wherein the alert apprises a test taker that the elapsed time is excessive for the test question, wherein the alert is generated based on an alert schedule for the test question, wherein the alert schedule is generated for the test taker based on a customized alert profile for the test taker, and wherein the customized alert profile includes previous performance information of the test taker, information to associate a level of difficulty of a particular test question with a capability category of the test taker to answer the particular test question, and alert thresholds for the test questions," as recited in claims 1, 23, 28, and 47.

In claims 1, 23, 28, and 47 of the present invention, an alert is generated after the test question timing data exceeds a threshold that has been defined for a specific user for a specific question. The alert schedule is generated based on an alert profile that is customized for a specific user and for specific test questions. In these claims, alerts may be generated for example after a specific user spends 2 minutes trying to answer a specific test question, then again after 5 minutes of trying to answer the same test question, and, in addition, an alert may be generated after exceeding a defined threshold equal to or greater than the time limit for the specific test question if each of these thresholds are defined in the alert profile for the specific user and specific test question. The alerts will be generated as indicated in the customized alert profile for the specific user and for the specific test question for that specific user. The alert notification of the present invention is a more intelligent and robust alert notification than merely displaying a constant display of elapsed time since a test question is presented.

Thomas and *Sugimoto* fail to teach or suggest "generating an alert after the test question timing data exceeds a threshold while continuing to present the test question for the test taker to

answer, wherein the alert apprises a test taker that the elapsed time is excessive for the test question, wherein the alert is generated based on an alert schedule for the test question, wherein the alert schedule is generated for the test taker based on a customized alert profile for the test taker, and wherein the customized alert profile includes previous performance information of the test taker, information to associate a level of difficulty of a particular test question with a capability category of the test taker to answer the particular test question, and alert thresholds for the test questions," as recited in claims 1, 23, 28, and 47. Therefore, the alleged combination of *Thomas* and *Sugimoto* does not teach or suggest this feature.

In view of the above, Appellants respectfully request withdrawal of the rejection of independent claims 1, 23, 28, and 47 under 35 U.S.C. § 103(a). Additionally, *Thomas* and *Sugimoto*, taken individually or in combination, do not teach or suggest the features of dependent claims 2-3, 24-25, and 48 at least by virtue of their dependency on independent claims 1, 23, and 47, respectively. Accordingly, Appellants respectfully request withdrawal of the rejection of claims 1-3, 23-25, 28, and 47-48 under 35 U.S.C. § 103(a).

B. GROUND OF REJECTION 2 (Claims 4-5, 26-27, 49, and 50)

The Final Office Action rejects claims 4-5, 26-27, 49, and 50 under 35 U.S.C. § 103(a) as being unpatentable over *Thomas* in view of *Sugimoto* as applied to the claims above and further in view of admitted prior art, hereinafter referred to as *APA*. This rejection is respectfully traversed.

Since claims 4, 5, 26, 27, 49 and 50 depend from independent claims 1, 23, and 47, the same distinctions between *Thomas* and *Sugimoto* and the invention recited in claims 1, 23, and 47 apply to dependent claims 4, 5, 26, 27, 49 and 50. As discussed above, *Thomas* and *Sugimoto*, taken alone or in combination, do not teach or suggest that "generating an alert after the test question timing data exceeds a threshold while continuing to present the test question for the test taker to answer, wherein the alert apprises a test taker that the elapsed time is excessive for the test question, wherein the alert is generated based on an alert schedule for the test question, wherein the alert schedule is generated for the test taker based on a customized alert profile for the test taker, and wherein the customized alert profile includes previous performance information of the test taker, information to associate a level of difficulty of a particular test question with a capability category of the test taker to answer the particular test question, and

alert thresholds for the test questions," as recited in claims 1, 23, and 47. Accordingly, Appellants respectfully requests withdrawal of the rejection of claim 4, 5, 26, 27, 49 and 50 under 35 U.S.C. §103(a).

C. GROUND OF REJECTION 3 (Claims 6, 12, 17-18, 29, 32-33, 35, 40-41, and 46)

The Final Office Action rejects claims 6, 12, 17-18, 29, 32-33, 35, 40-41, and 46 under 35 U.S.C. § 103(a) as being unpatentable over *Thomas* in view of *Sugimoto* and further in view of *Hoehn-Saric et al.*, System and Administration of Remotely-Proctored, Secure Examinations and Methods Therefor, U.S. Patent No 5915973 (June 29, 1999), hereinafter referred to as *Hoehn-Saric*. This rejection is respectfully traversed.

C.1 Claims 6, 12, 18, 29, 32-33, 35, 41, and 46

With respect to independent claims 6, 29, and 46, the Examiner states:

> 11. In regards to claims 6, 29, 32-33 and 46, Thomas in view of Sugimoto discloses the testing system described above for claim 1 where the system may operate over a network, which examiner is interpreting to be an interface, with a client (3:63-65). Thomas lacks in disclosing the use of instant messaging.
> 12. In related prior art, Hoehn-Saric teaches that the administrator of a test has great flexibility in sending and receiving messages associated with the administration of a test (Col6 and 8). This flexibility may include sending and responding to messages with the test product users as quickly as the physical interconnection is capable of processing and sending them, making them "instant messages". One skilled in the art would recognize the advantages of providing a messaging system that provides rapid communication in a timed testing situation.
> 13. Therefore, it would have been obvious to one of ordinary skill in the art to provide test examination system as disclosed by Thomas with messaging capability to take full advantage of the speed of the remote connection with the test product user to provide the ability to send and receive instant messages as taught by Hoehn-Saric for the purposes of distributing test evaluations to users in a more timely fashion in a time critical environment.

Final Office Action dated August 23, 2007, pages 4-5.

Claim 6, which is representative of the other rejected independent claims 29 and 46 with regard to similarly recited subject matter, reads as follows:

> 6. A computer-implemented method of monitoring a test question response time, comprising the steps of:
> administering a test to a remotely located user of a client device;

receiving test question timing data from the client device, the test question timing data representing an elapsed time used by the remotely located user in attempting to answer a test question from a plurality of test questions that are to be provided to the client device during administration of the test;

outputting the test question timing data to a proctor device such that the proctor device may monitor the elapsed time in attempting to answer the test question for the remotely located user;

wherein said remotely located user can send an instant message to and receive an instant message from said proctor device and wherein said proctor device can send an instant message to and receive an instant message from a plurality of remotely located users, and wherein instant messages are used to communicate and clarify test question wording details, test instructions, and the test question timing data during the test; and

alerting the remotely located user when the test question timing data exceeds a predetermined threshold based on an alert schedule for the test question while the remotely located user continues to attempt to answer the test question, wherein the alert schedule is generated for the remotely located user based on a customized alert profile for the remotely located user, and wherein the customized alert profile includes previous performance information of the remotely located user, information to associate a level of difficulty of a particular test question with a capability category of the remotely located user to answer the particular test question, and a plurality of predetermined thresholds for the plurality of test questions. (emphasis added)

The Examiner bears the burden of establishing a *prima facie* case of obviousness based on the prior art when rejecting claims under 35 U.S.C. § 103. *In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992). For an invention to be *prima facie* obvious, the prior art must teach or suggest all claim limitations. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

Thomas, *Sugimoto*, and *Hoehn-Saric*, taken alone or in combination, do not teach or suggest "alerting the remotely located user when the test question timing data exceeds a predetermined threshold based on an alert schedule for the test question while the remotely located user continues to attempt to answer the test question, wherein the alert schedule is generated for the remotely located user based on a customized alert profile for the remotely located user, and wherein the customized alert profile includes previous performance information of the remotely located user, information to associate a level of difficulty of a particular test question with a capability category of the remotely located user to answer the particular test question, and a plurality of predetermined thresholds for the plurality of test questions," as recited in independent claims 6, 29, and 46.

As discussed above, *Thomas* and *Sugimoto*, do not teach this alerting step as recited in the independent claims. In addition, *Hoehn-Saric* does not provide for the deficiencies of *Thomas* and *Sugimoto* with regard to the alerting step of amended independent claims 6, 29, and 49. *Hoehn-Saric* is directed to a system for controlling the administration of remotely proctored, secure examinations at a remote test station, and a method for administering examinations. *Hoehn-Saric* discloses that audio/visual proctoring data can be transmitted to a central station and displayed so that an administrator can view the testing event. *Hoehn-Saric* does not mention alerts, alert thresholds, alert schedules, or alert profiles.

Additionally, *Thomas*, *Sugimoto*, and *Hoehn-Saric*, taken alone or in combination, do not teach or suggest that "said remotely located user can send an instant message to and receive an instant message from said proctor device and wherein said proctor device can send an instant message to and receive an instant message from a plurality of remotely located users, and wherein instant messages are used to communicate and clarify test question wording details, test instructions, and the test question timing data during the test," as recited in amended independent claims 6, 29, and 46. The Office Action states that *Thomas* lacks in disclosing the use of instant messaging. *Hoehn-Saric* discloses that audio/visual proctoring data can be transmitted to a central station and displayed so that an administrator can view the testing event. *Hoehn-Saric* does not teach the instant messaging features as recited in amended claims 6, 29, and 46. For example, in amended claims 6, 29, and 46, the proctor device can send an instant message to a plurality of remotely located users to communicate and clarify test instructions.

Thomas, *Sugimoto*, and *Hoehn-Saric* fail to teach or suggest "alerting the remotely located user when the test question timing data exceeds a predetermined threshold based on an alert schedule for the test question while the remotely located user continues to attempt to answer the test question, wherein the alert schedule is generated for the remotely located user based on a customized alert profile for the remotely located user, and wherein the customized alert profile includes previous performance information of the remotely located user, information to associate a level of difficulty of a particular test question with a capability category of the remotely located user to answer the particular test question, and a plurality of predetermined thresholds for the plurality of test questions," as recited in claims 6, 29, and 46. Therefore, the combination of *Thomas*, *Sugimoto*, and *Hoehn-Saric* does not teach or suggest these features.

In view of the above, Appellants respectfully request withdrawal of the rejection of

independent claims 6, 29, and 46 under 35 U.S.C. §103(a). Additionally, *Thomas*, *Sugimoto*, and *Hoehn-Saric*, taken individually or in combination, do not teach or suggest the features of dependent claims 12, 17-18, 32-33, 35, and 40-41 at least by virtue of their dependency on independent claims 6 and 29, respectively. Accordingly, Appellants respectfully request withdrawal of the rejection of claims 6, 12, 17-18, 29, 32-33, 35, 40-41, and 46 under 35 U.S.C. §103(a).

C.2. Claims 17 and 40

In addition to the above, Appellants respectfully submit that claims 17 and 40 are independently distinguishable from the *Thomas*, *Sugimoto*, and *Hoehn-Saric* references. Claim 17 depends from claim 6 and claim 40 depends from claim 29. Claims 17 and 40 additionally recite "monitoring the test question timing data for evidence of greater than expected response time to the test question, wherein outputting the test question timing data to a proctor device is performed by a test administration system in response to determining that evidence of greater than expected response time to the test question is present." *Thomas*, *Sugimoto*, and *Hoehn-Saric*, taken alone or in combination, do not teach or suggest this feature. To the contrary, a constant display of an elapsed time at an examinee device is disclosed. *Thomas'* invention does not provide any control as to how a computer system executes a constant display. Appellents respectfully disagree that a constant display of elapsed time is the same as outputting test question timing data in response to determining that evidence of greater than expected response time to the test question is present.

D. GROUND OF REJECTION 4 (Claims 7-8, 13, 16, 30-31, 36, and 39)

The Final Office Action rejects claims 7-8, 13, 16, 30-31, 36, and 39 under 35 U.S.C. § 103(a) as being unpatentable over *Thomas* in view of *Sugimoto* and *Hoehn-Saric* as applied to the claims above and further in view of *APA*.

Additionally, *Thomas* and *Hoehn-Saric*, taken individually or in combination, do not teach or suggest the features of dependent claims 7-8, 13, 16, 30-31, 36, and 39 at least by virtue of their dependency on independent claims 6 and 29, respectively. Accordingly, Appellants respectfully request withdrawal of the rejection of claims 7-8, 13, 16, 30-31, 36, and 39 under 35 U.S.C. §103(a).

E. GROUND OF REJECTION 5 (Claims 14-15, 21-22, 37-38, and 44-45)

The Final Office Action rejects claims 14-15, 21-22, 37-38, and 44-45 under 35 U.S.C. § 103(a) as being unpatentable by *Thomas* in view of *Sugimoto* and *Hoehn-Saric* as applied to claim 6 above, and further in view of *Kershaw et al.*, System and Methods for Computer Based Testing, U.S. Patent No. 5,827,070 (October 27, 1998), hereinafter referred to as *Kershaw*. This rejection is respectfully traversed.

E.1. Claims 14-15, 21-22, 37-38, and 44-45

Since claims 14, 15, 21, 22, 37, 38, 44 and 45 depend from independent claims 6 and 29, the same distinctions between *Thomas*, *Sugimoto*, and *Hoehn-Saric* and the invention recited in claims 6 and 29 apply to dependent claims 14, 15, 21, 22, 37, 38, 44 and 45. As discussed above, *Thomas*, *Sugimoto*, and *Hoehn-Saric*, taken alone or in combination, fail to teach or suggest "alerting the remotely located user when the test question timing data exceeds a predetermined threshold based on an alert schedule for the test question while the remotely located user continues to attempt to answer the test question, wherein the alert schedule is generated for the remotely located user based on a customized alert profile for the remotely located user, and wherein the customized alert profile includes previous performance information of the remotely located user, information to associate a level of difficulty of a particular test question with a capability category of the remotely located user to answer the particular test question, and a plurality of predetermined thresholds for the plurality of test questions," as recited in claims 6, 29, and 46. *Kershaw* is direct to a system and method for computer based testing. *Kershaw* discloses that, after all of the examinees' tests are graded, statistical processing may be provided to evaluate tests and test results. *Kershaw* shows an examinee database file that contains information such as test identification information, examinee registration information, and a session start time and a session end time for a test. *Kershaw* does not mention alerts for test questions or alert thresholds for test questions. The Office Action states that *Kershaw* lacks in tracking of question timing data. *Kershaw* does not provide for the deficiencies of *Thomas*, *Sugimoto*, and *Hoehn-Saric* with regard to independent claims 6, 29, and 46. Accordingly, Appellants respectfully request withdrawal of the rejection of claims 14, 15, 21, 22, 37, 38, 44 and 45 under 35 U.S.C. §103(a) at least by virtue of their dependency on claims 6 and 29, respectively.

E.2. Claims 21-22 and 44-45

In addition to being dependent on their respective independent claims, amended claims 21-22 and 44-45 are also distinguished over the *Thomas*, *Sugimoto*, *Hoehn-Saric*, and *Kershaw* references based on the specific features recited therein. Claims 21-22 are dependent on independent claim 6; and claims 44-45 are dependent on independent claim 29. *Thomas*, *Sugimoto*, *Hoehn-Saric*, and *Kershaw*, taken individually or in combination, do not teach or suggest "storing a response to the test question from the remotely located user to update the customized alert profile for use in future tests," as recited in claims 21 and 44; and, in addition, "storing of the timing data for the test question to update timing data for the remotely located user in the customized alert profile for use in future tests," as recited in claims 22 and 45.

F. GROUND OF REJECTION 6 (Claim 51)

The Final Office Action rejects claim 51 under 35 U.S.C. § 103(a) as being unpatentable by *Kershaw* in view of *Thomas*, *Hoehn-Saric*, and *Sugimoto*. This rejection is respectfully traversed.

Claim 51 reads as follows:

> 51. A computer-implemented method for monitoring responses to test questions presented in a data processing system, the method comprising the steps of:
>
> administering, from an examination server, a plurality of tests to a plurality of remotely located users on a plurality of user devices and for each test of said plurality of tests that is administered:
>
> establishing a session identification for the administration of the test to the remotely located user, wherein said session identification includes a user identification, a test identifier, and a proctor device identifier;
>
> identifying presentation of the test questions on a user device of said user devices;
>
> responsive to the presentation of the test questions on said user device, monitoring test question timing data in which the test question timing data represents an elapsed time since an answered question from the test questions has been presented, wherein the elapsed time is an amount of time in attempting to answer a test question;
>
> correlating the test question timing data to the administration of the test to the remotely located user based on the session identification;
>
> wherein the test question timing data is output to said proctor device, based on said proctor device identifier, in response to determining

that evidence of greater than expected response time to the test question is present; and

generating an alert message after the test question timing data exceeds a threshold while continuing to present the test question for the remotely located user to answer, wherein the alert message apprises the remotely located user that the elapsed time is excessive for the test question, wherein the alert message is generated based on an alert schedule for the test question, wherein the alert schedule is generated for the remotely located user based on a customized alert profile for the remotely located user, and wherein the customized alert profile includes previous performance information of the remotely located user, information to associate a level of difficulty of a particular test question with a capability category of the remotely located user to answer the particular test question, and a plurality of alert thresholds for the test questions;

wherein the remotely located user can send instant messages to and receive instant messages from a proctor device associated with said examination server and wherein said proctor device can send instant messages to and receive instant messages from the plurality of remotely located users, and wherein instant messages are used to communicate and clarify test question wording details, test instructions, and the test question timing data for the remotely located user during the test. (emphasis added)

The Examiner bears the burden of establishing a *prima facie* case of obviousness based on the prior art when rejecting claims under 35 U.S.C. § 103. *In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992). For an invention to be *prima facie* obvious, the prior art must teach or suggest all claim limitations. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

Similarly, as discussed above, *Kershaw*, *Thomas*, *Hoehn-Saric*, and *Sugimoto*, taken alone or in combination, fail to teach or suggest "generating an alert message after the test question timing data exceeds a threshold while continuing to present the test question for the remotely located user to answer, wherein the alert message apprises the remotely located user that the elapsed time is excessive for the test question, wherein the alert message is generated based on an alert schedule for the test question, wherein the alert schedule is generated for the remotely located user based on a customized alert profile for the remotely located user, and wherein the customized alert profile includes previous performance information of the remotely located user, information to associate a level of difficulty of a particular test question with a capability category of the remotely located user to answer the particular test question, and a plurality of alert thresholds for the test questions." Accordingly, Appellants respectfully request withdrawal of the rejection of claim 51 under 35 U.S.C. §103(a).

G. CONCLUSION

As shown above, *Kershaw*, *Thomas*, *Hoehn-Saric*, and *Sugimoto* do not anticipate the claims. Similarly, the Examiner has failed to state a *prima facie* obviousness rejection against the claims. Therefore, Applicants request that the Board of Patent Appeals and Interferences reverse the rejections. Additionally, Applicants request that the Board direct the Examiner to allow the claims.

/Gerald H. Glanzman/
Gerald H. Glanzman
Reg. No. 25,035
YEE & ASSOCIATES, P.C.
PO Box 802333
Dallas, TX 75380
(972) 385-8777

GHG/VJA

CLAIMS APPENDIX

The text of the claims involved in the appeal are:

1. A computer-implemented method for monitoring responses to test questions presented in a data processing system, the method comprising the computer implemented steps of:

identifying presentation of the test questions on the data processing system;

responsive to the presentation of the test questions on the data processing system, monitoring test question timing data in which the test question timing data represents an elapsed time since an answered question from the test questions has been presented, wherein the elapsed time is an amount of time in attempting to answer a test question; and

generating an alert after the test question timing data exceeds a threshold while continuing to present the test question for the test taker to answer, wherein the alert apprises a test taker that the elapsed time is excessive for the test question, wherein the alert is generated based on an alert schedule for the test question, wherein the alert schedule is generated for the test taker based on a customized alert profile for the test taker, and wherein the customized alert profile includes previous performance information of the test taker, information to associate a level of difficulty of a particular test question with a capability category of the test taker to answer the particular test question, and alert thresholds for the test questions.

2. The computer-implemented method of claim 1, wherein the monitoring step is performed by a proctor device or a program on the data processing system.

3. The computer-implemented method of claim 1, wherein the presentation of the test questions is based on levels of difficulty of the test questions and the capability category of the test taker to answer the test questions.

4. The computer-implemented method of claim 1 further comprising:

billing a client for monitoring the presentation of the test questions.

5. The computer-implemented method of claim 1, wherein the test questions are part of a test and further comprising:

storing an identification of a number of test takers for the test; and

billing a client based on the number of test takers for the test.

6. A computer-implemented method of monitoring a test question response time, comprising the steps of:

administering a test to a remotely located user of a client device;

receiving test question timing data from the client device, the test question timing data representing an elapsed time used by the remotely located user in attempting to answer a test question from a plurality of test questions that are to be provided to the client device during administration of the test;

outputting the test question timing data to a proctor device such that the proctor device may monitor the elapsed time in attempting to answer the test question for the remotely located user;

wherein said remotely located user can send an instant message to and receive an instant

message from said proctor device and wherein said proctor device can send an instant message to and receive an instant message from a plurality of remotely located users, and wherein instant messages are used to communicate and clarify test question wording details, test instructions, and the test question timing data during the test; and

alerting the remotely located user when the test question timing data exceeds a predetermined threshold based on an alert schedule for the test question while the remotely located user continues to attempt to answer the test question, wherein the alert schedule is generated for the remotely located user based on a customized alert profile for the remotely located user, and wherein the customized alert profile includes previous performance information of the remotely located user, information to associate a level of difficulty of a particular test question with a capability category of the remotely located user to answer the particular test question, and a plurality of predetermined thresholds for the plurality of test questions.

7. The computer-implemented method of claim 6, further comprising billing a test developer for administration of the test to the remotely located user.

8. The computer-implemented method of claim 6, further comprising billing the remotely located user for administration of the test.

12. The computer-implemented method of claim 6, further comprising storing a score for the test in a permanent storage.

13. The computer-implemented method of claim 6, wherein the test is developed by a test developer and wherein the method is implemented by a test administration system that is operated by a different entity from the test developer.

14. The computer-implemented method of claim 6, further comprising:

receiving a request for administration of the test to the remotely located user;

establishing a session identification for the administration of the test to the remotely located user; and

correlating the test question timing data to the administration of the test to the remotely located user based on the session identification.

15. The computer-implemented method of claim 14, wherein the session identification includes a proctor device identifier, and wherein outputting the test question timing data to the proctor device is based on the proctor device identifier.

16. The computer-implemented method of claim 6, further comprising:

storing an indicator of a number of test takers for the test; and

billing a test developer of the test based on the number of test takers for the test.

17. The computer-implemented method of claim 6, further comprising:

monitoring the test question timing data for evidence of greater than expected response time to the test question, wherein outputting the test question timing data to a proctor device is performed by a test administration system in response to determining that evidence of greater than expected response time to the test question is present.

18. The computer-implemented method of claim 17, wherein monitoring the test question timing data for evidence of greater than expected response time to the test question includes comparing previously received test question timing data to currently received test question timing data to determine if a change in the test question timing data indicates evidence of greater than expected response time to the test question.

21. The computer-implemented method of claim 6, further comprising: storing a response to the test question from the remotely located user to update the customized alert profile for use in future tests.

22. The computer-implemented method of claim 6, further comprising: storing of the timing data for the test question to update timing data for the remotely located user in the customized alert profile for use in future tests.

23. An apparatus for monitoring responses to test questions presented in a data processing system, the apparatus comprising:

identifying means for identifying presentation of the test questions on the data processing system;

monitoring means, responsive to the presentation of the test questions on the data processing system, for monitoring test question timing data in which the test question timing data represents an elapsed time since an answered question from the test questions has been presented, wherein the elapsed time is an amount of time in attempting to answer a test question; and

generating means for generating an alert after the test question timing data exceeds a

threshold while continuing to present the test question for the test taker to answer, wherein the alert apprises a test taker that the elapsed time is excessive for the test question, wherein the alert is generated based on an alert schedule for the test question, wherein the alert schedule is generated for the test taker based on a customized alert profile for the test taker, and wherein the customized alert profile includes previous performance information of the test taker, information to associate a level of difficulty of a particular test question with a capability category of the test taker to answer the particular test question, and alert thresholds for the test questions.

24. The apparatus of claim 23, wherein the apparatus is a proctor device or a program on the data processing system.

25. The apparatus of claim 23, wherein the presentation of the test questions is based on levels of difficulty of the test questions and the capability category of the test taker to answer the test questions.

26. The apparatus of claim 23 further comprising:

billing means for billing a client for monitoring the presentation of the test questions.

27. The apparatus of claim 23, wherein the test questions are part of a test and further comprising:

storing means for storing an identification of a number of test takers for the test; and

billing means for billing a client based on the number of test takers for the test.

28. A data processing system comprising:

a bus system;

a communications unit connected to the bus system;

a storage device connected to the bus system, wherein the storage device includes a set of instructions; and

a processing unit connected to the bus system, wherein the processing unit executes the set of instructions to identify presentation of the test questions on the data processing system, monitor test question timing data in response to the presentation of the test questions on the data processing system in which the test question timing data represents an elapsed time since an answered question from the test questions has been presented, wherein the elapsed time is an amount of time in attempting to answer a test question, and generate an alert after the test question timing data exceeds a threshold while continuing to present the test question for a test taker to answer, wherein the alert apprises the test taker that the elapsed time is excessive for the test question, wherein the alert is generated based on an alert schedule for the test question, wherein the alert schedule is generated for the test taker based on a customized alert profile for the test taker, and wherein the customized alert profile includes previous performance information of the test taker, information to associate a level of difficulty of a particular test question with a capability category of the test taker to answer the particular test question, and alert thresholds for the test questions.

29. An apparatus for monitoring a test question response time, comprising:

a controller; and

at least one interface coupled to the controller, wherein the controller administers a test to a remotely located user of a client device via the at least one interface, receives test question timing data from the client device via the at least one interface, the test question timing data representing an elapsed time used by the remotely located user in attempting to answer a test question from a plurality of test questions that are to be provided to the client device during administration of the test, outputs the test question timing data to a proctor device via the at least one interface, such that the proctor device may monitor the elapsed time in attempting to answer the test question for the remotely located user, wherein said processing unit provides instant messaging between said remotely located user and a proctor, wherein said remotely located user can send an instant message to and receive an instant message from said proctor and wherein said proctor can send an instant message to and receive an instant message from a plurality of remotely located users, and wherein instant messages are used to communicate and clarify test question wording details, test instructions, and the test question timing data during the test, and wherein the controller alerts the remotely located user when the test question timing data exceeds a predetermined threshold based on an alert schedule for the test question, wherein the alert schedule is generated for the remotely located user based on a customized alert profile for the remotely located user, and wherein the customized alert profile includes previous performance information of the remotely located user, information to associate a level of difficulty of a particular test question with a capability category of the remotely located user to answer the particular test question, and a plurality of predetermined thresholds for the plurality of test questions.

30. The apparatus of claim 29, wherein the controller bills a test developer for administration of the test to the remotely located user.

31. The apparatus of claim 29, wherein the controller bills the remotely located user for administration of the test.

32. The apparatus of claim 29, wherein the controller sends an instant message to the client device via the at least one interface.

33. The apparatus of claim 29, wherein the controller receives an instant message from the client device via the at least one interface.

35. The apparatus of claim 29, further comprising a storage device, wherein the controller stores a score for the test in the storage device.

36. The apparatus of claim 29, wherein the test is developed by a test developer and wherein the apparatus is operated by a different entity from the test developer.

37. The apparatus of claim 29, wherein the controller receives a request for administration of the test to the remotely located user, establishes a session identification for the administration of the test to the remotely located user, and correlates the test question timing data to the administration of the test to the remotely located user based on the session identification.

38. The apparatus of claim 37, wherein the session identification includes a proctor device identifier, and wherein the controller outputs the test question timing data to the proctor device based on the proctor device identifier.

39. The apparatus of claim 29, further comprising a storage device, wherein the controller stores an indicator of a number of test takers for the test in the storage device and bills a test developer of the test based on the number of test takers for the test.

40. The apparatus of claim 29, wherein the controller monitors the test environment data for evidence of greater than expected response time to the test question, and wherein the controller outputs the test question timing data to a proctor device in response to determining that evidence of greater than expected response time to the test question is present.

41. The apparatus of claim 40, wherein the controller monitors the test question timing data for evidence of greater than expected response time to the test question by comparing previously received test question timing data to currently received test environment data to determine if a change in the test question timing data indicates evidence of greater than expected response time to the test question.

44. The apparatus of claim 29, further comprising: storing a response to the test question from the remotely located user to update the customized alert profile for use in future tests.

45. The apparatus of claim 29, further comprising: storing of the timing data for the test question to update timing data for the remotely located user in the customized alert profile for use in future tests.

46. A computer program product in a computer readable medium for monitoring a test question response time, comprising:

first instructions for administering a test to a remotely located user of a client device;

second instructions for receiving test question timing data from the client device, the test question timing data representing an elapsed time used by the remotely located user in attempting to answer a test question from a plurality of test questions that are to be provided to the client device during administration of the test;

third instructions for outputting the test question timing data to a proctor device such that the proctor device may monitor the elapsed time in attempting to answer the test question for the remotely located user; and

fourth instructions for providing instant messaging between the remotely located user and a proctor, wherein said remotely located user can send an instant message to and receive an instant message from said proctor and wherein said proctor can send an instant message to and receive an instant message from a plurality of remotely located users, and wherein instant messages are used to communicate and clarify test question wording details, test instructions, and the test question timing data during the test; and

fifth instructions for alerting the remotely located user when the test question timing data exceeds a predetermined threshold based on an alert schedule for the test question while the remotely located user continues to attempt to answer the test question, wherein the alert schedule is generated for the remotely located user based on a customized alert profile for the remotely located user, and wherein the customized alert profile includes previous performance information of the remotely located user, information to associate a level of difficulty of a particular test question with a capability category of the remotely located user to answer the particular test

question, and a plurality of predetermined thresholds for the plurality of test questions.

47. A computer program product in a computer readable medium for use in monitoring responses to test questions presented in a data processing system, the computer program product comprising:

first instructions for identifying presentation of the test questions on the data processing system;

second instructions, responsive to the presentation of the test questions on the data processing system, for monitoring test question timing data in which the test question timing data represents an elapsed time since an answered question from the test questions has been presented, wherein the elapsed time is an amount of time in attempting to answer a test question; and

third instructions for generating an alert after the test question timing data exceeds a threshold while continuing to present the test question for the test taker to answer, wherein the alert apprises a test taker that the elapsed time is excessive for the test question, wherein the alert is generated based on an alert schedule for the test question, wherein the alert schedule is generated for the test taker based on a customized alert profile for the test taker, and wherein the customized alert profile includes previous performance information of the test taker, information to associate a level of difficulty of a particular test question with a capability category of the test taker to answer the particular test question, and alert thresholds for the test questions.

48. The computer program product of claim 47, wherein the second instructions are located in a proctor device or a program on the data processing system.

49. The computer program product of claim 47 further comprising:

fourth instructions for billing a client for monitoring the presentation of the test questions.

50. The computer program product of claim 47, wherein the test questions are part of a test and further comprising:

fourth instructions for storing an identification of a number of test takers for the test; and

fifth instructions for billing a client based on the number of test takers for the test.

51. A computer-implemented method for monitoring responses to test questions presented in a data processing system, the method comprising the steps of:

administering, from an examination server, a plurality of tests to a plurality of remotely located users on a plurality of user devices and for each test of said plurality of tests that is administered:

establishing a session identification for the administration of the test to the remotely located user, wherein said session identification includes a user identification, a test identifier, and a proctor device identifier;

identifying presentation of the test questions on a user device of said user devices;

responsive to the presentation of the test questions on said user device, monitoring test question timing data in which the test question timing data represents an elapsed time since an answered question from the test questions has been presented, wherein the elapsed time is an amount of time in attempting to answer a test question;

correlating the test question timing data to the administration of the test to the remotely located user based on the session identification;

wherein the test question timing data is output to said proctor device, based on said proctor device identifier, in response to determining that evidence of greater than expected response time to the test question is present; and

generating an alert message after the test question timing data exceeds a threshold while continuing to present the test question for the remotely located user to answer, wherein the alert message apprises the remotely located user that the elapsed time is excessive for the test question, wherein the alert message is generated based on an alert schedule for the test question, wherein the alert schedule is generated for the remotely located user based on a customized alert profile for the remotely located user, and wherein the customized alert profile includes previous performance information of the remotely located user, information to associate a level of difficulty of a particular test question with a capability category of the remotely located user to answer the particular test question, and a plurality of alert thresholds for the test questions;

wherein the remotely located user can send instant messages to and receive instant messages from a proctor device associated with said examination server and wherein said proctor device can send instant messages to and receive instant messages from the plurality of remotely located users, and wherein instant messages are used to communicate and clarify test question wording details, test instructions, and the test question timing data for the remotely located user during the test.

EVIDENCE APPENDIX

There is no evidence to be presented.

RELATED PROCEEDINGS APPENDIX

There are no related proceedings.